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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/615,652	07/09/2003	Kristian DiMatteo	1001.1309103	9311

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CROMPTON, SEAGER & TUFTE, LLC  
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SUITE 800  
MINNEAPOLIS, MN 55403-2420

EXAMINER
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YABUT, DIANE D

ART UNIT	PAPER NUMBER
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3734

MAIL DATE	DELIVERY MODE
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08/23/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

**Office Action Summary**

Application No.

10/615,652

Applicant(s)

DIMATTEO, KRISTIAN

Examiner

Diane Yabut

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 25 July 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 20,22,24-26,34-37 and 39-44 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 20,22,24-26,34-37 and 39-44 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Continued Examination Under 37 CFR 1.114*

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 25 July 2007 has been entered.

### *Claim Rejections - 35 USC § 103*

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 20, 22, 25-26, 34-36, and 39-44 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Ravenscroft et al.** (U.S. Patent No. **6,007,558**) in view of **Bosma et al.** (U.S. Patent No. **6,241,746**).

Claims 20, 22, 25, 34, and 39-44: Ravenscroft et al. discloses a conically-shaped filtering basket including an apex, comprising a body member **12**, a plurality of struts including a proximal end region and a distal end region, the plurality of struts, or arms,

**26** that are substantially straight and have a distal (or first) end region and a proximal (or second) end region wherein the proximal end region is fixedly attached to the body member with the struts extending therefrom, each arm including a joined end fixedly attached to the apex, and a plurality of anchoring members **28** disposed adjacent the distal end region of at least some of the plurality of struts or on a distal end of each of the struts, and a weakened region, or reduced cross-sectional area region, **30** defined in each of the struts adjacent the anchoring member, coupling the anchoring member to the distal end region of at least some of the plurality of struts (Figures 1-2).

Ravenscroft et al. discloses the claimed device except for a weakened or reduced cross-sectional area region being configured to fail, releasing the anchoring member from a stem portion **12**.

Bosma et al. teaches a filtering device having a weakened region or reduced cross-sectional area region **22** being configured to fail, before the plurality of struts **14** fail, leading to separation from the filtering device body struts, or a means for releasing the anchoring member (guidewire being used to apply a retrieval force on a hook attached to locking pin **26**) releasing the anchoring member **18, 20** from the distal end of each of the plurality of struts **14** (Figures 1-3; col. 3, lines 53-64). It would have been obvious to one of ordinary skill in the art at the time of invention to provide a weakened region in a filtering device configured to fail to release the anchoring members, as taught by Bosma et al., to Ravenscroft et al. in order to facilitate removal of the filtering device or to convert the vascular filter into a stent (col. 1, line 54 to col. 2, line 4 and col. 4, line 59 to col. 5, line 11). Although Ravenscroft et al. provides hooks that bend and

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straighten in response to a withdrawal force to avoid tearing the vessel wall, it would be desirable to modify Ravenscroft et al. by releasing the anchoring member from the plurality of struts to avoid any kind of disturbance to the vessel wall in case of excessive or unexpected growth of the endothelium layer, since Bosma et al. teaches a filter capable of being implanted for a selectively variable duration. Also, weakened, reduced cross-sectional area, or "frangible" regions are commonly used in the art to facilitate removal of delivery devices from the devices being delivered

Claim 26: Ravenscroft et al. discloses the struts having bends **42** (Figure 10).

Claims 35-36: Ravenscroft et al. discloses the reduced cross-sectional area region **30** being defined by a notch or divet, wherein a "notch" and a "divet" are both understood as meaning an "indentation" (Figure 2).

4. Claim 24 is rejected under 35 U.S.C. 103(a) as being unpatentable over **Ravenscroft et al.** (U.S. Patent No. **6,007,558**) and **Bosma et al.** (U.S. Patent No. **6,241,746**), as applied to Claim 20 above, and further in view of **El-Nounou et al.** (U.S. Patent No. **5,242,462**).

Claim 24: Ravenscroft et al. and Bosma et al. disclose the claimed device except for the body member including a bore.

El-Nounou et al. teaches a filter device with a body member **62** having a bore **68** which is beneficial in receiving a guidewire during manipulation of the filter (Figure 7 and col. 4, lines 51-53, col. 2, lines 35-42). It would have been obvious to one of ordinary skill in the art at the time of invention to provide a bore in the body member, as taught

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by El-Nounou et al., to Ravenscroft et al. and Bosma et al. in order to manipulate the filter device by a guidewire or hook.

5. Claim 37 is rejected under 35 U.S.C. 103(a) as being unpatentable over **Ravenscroft et al.** (U.S. Patent No. **6,007,558**) and **Bosma et al.** (U.S. Patent No. **6,241,746**), as applied to Claim 34 above, and further in view of **Ambrisco et al.** (U.S. Patent No. **6,007,557**).

Claim 37: Ravenscroft et al. and Bosma et al. discloses the claimed device except for the reduced-cross sectional area being defined by an opening in the strut.

Ambrisco et al. teaches a reduced cross-sectional area defined by an opening **318** in a strut **312** which can be useful in allowing a guidewire or hook to pass through for manipulation of the filter device (Figure 36C and col. 20, lines 1-15). It would have been obvious to one of ordinary skill in the art at the time of invention to provide an opening in the strut, as taught by Ambrisco et al., to Ravenscroft et al. and Bosma et al. in order to manipulate the filter device by a guidewire or hook.

### ***Response to Arguments***

6. Applicant's arguments with respect to claims 20-6 and 34-40 have been considered but are moot in view of the new ground(s) of rejection.

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***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Diane Yabut whose telephone number is (571) 272-6831. The examiner can normally be reached on M-F: 9AM-4PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Hayes can be reached on (571) 272-4959. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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MICHAEL J. HAYES  
SUPERVISORY PATENT EXAMINER